Realizing redundancy with PPPoE

There is a product that enables redundant configuration by combining the PPPoE with the function of router. That is CentreCOM AR320 of Allied Telesys.

AR320 has a 'trigger' function for letting the router execute the event in a predetermined time. When the session of PPPoE becomes discontinued due to generation of line trouble, setting so that the traffic for router at the discontinued line side is transferred to all other routers, it is possible to realize the redundancy (Fig. 6).

Further, AR320 is mounted with >VRRP of router 2 double protocol. Even when trouble is generated in router or LAN, the line used can be smoothly switched. It is compatible with multi-group VRRP as well, and with every personal computer changed in default gateway specification, two lines can be used together in normal operation mode.

To employ a configuration, it is necessary to make the contract for two broadband lines, but the charge for CATV or ADSL is lower as compared with conventional exclusive line type services. The charge is sometimes relatively lower even in case the contract is made for two lines. It is necessary for users fully utilizing broadband lines to take into account products having such a function of enhancing endurance against trouble.

Fig. 6

There is a product that realizes redundancy by using PPP over Ethenet. CentreCOM AR320 of Allied Telesys has a 'trigger' function for switching the routing passage in a predetermined time. Using this function, when the session of PPP over Ethemet becomes discontinued, the endurance against trouble can be enhanced by setting so as to switch the routing passage. Also, AR320 is mounted with protocol VRRP provided with redundancy so that it is capable of switching the passage even in case of generation of trouble in the router itself or LAN.

Provider B

Provider A

······ Communication business station ······

It is compatible with multi group VRRP as well, and a plurality of lines can be used in normal operation mode.

(2) When R2 becomes unable to make packet exchange with R1, the default gateway is dynamically switched. In this way, it is possible for the personal computer using R1 as default gateway to ensure the communication.

Grouped by VRRP

VRRP packet is periodically exchanged.

Switching

(1) Trouble is generated in R1, resulting in communication failure.

(1) The session of PPP over Ethernet becomes discontinued due to generation of line trouble.

(2) When R1 becomes unable to communicate with WAN for a specific length of time, the traffic for R1 is delivered to R2 in order to assure the communication

Personal computer A using R1 as default gateway

Personal computer B using R1 as default gateway

Personal computer C using R2 as default gateway

M : Cable modem/ ADSL modem

R : Broadband router

VRRP : virtual router redundant protocol
ADSL : asymmetric digital subscriber line

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